## Abin Mathew Thomas | Sr IoT Engineer

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#### **WORK EXPERIENCE**

Working as AI developer with 1-year experience in Artificial Intelligence domain and 2.5 years of experience in the Internet of Things domain. Developed learning modules and number of PoCs on IoT and AI. Hands on Experience in deep learning and machine learning algorithms, sound knowledge on Hardware development and Cloud technology. Dedicated team player who has strong analytical, problem solving, organizational and project management skills.

### SmartBridge, AI Developer

November 2017 – Till Date

- Trained 500+ interns to enrich knowledge in the stream of AI and IBM cloud.
- Designing and developing basic Machine Learning and Deep Learning systems.
- Research and implement appropriate AI algorithms and tools.
- Develop Machine Learning applications according to requirements.
- Conducted various meetups on AI and IBM Watson services in collaboration with IBM. Conducted
   Technology Hackathons in various reputed colleges.

#### SmartBridge, Sr. IoT Engineer

February 2016 – November 2017

- Full responsibility of various IoT based projects.
- **Handled entire projects** from understanding requirement to development of prototype.
- **Team lead** of project developers.
- Conducted workshops and FDP's on IOT in many colleges.
- Corporate training in Cyient.
- Responsible for doing the research and preparing prototypes or proof of concepts
- Conducting boot camps and hackathons in collaboration with IBM all over Telangana and Andhra
   Pradesh

#### **Career Highlights:**

- Mentored a team for **Smart India Hackathon** which won the **1**<sup>st</sup> **position**.
- Participated in **Hack 2 build hackathon** and secured top 5<sup>th</sup> position.
- Joined as a mentor in **IBM developers Code Day** on Blockchain.
- Organized and mentored a team at International Blockchain Congress 2018 which won the 1<sup>st</sup> prize.
- Technical mentoring for **Excite-2k18** at JNTUH (45 days' Industrial product development program).

#### A Gesture-based Tool for Sterile Browsing of Radiology Images in Operation Theater

- This project aims at developing a system which is a sterile gesture interface for users, such as doctors/surgeons, to browse medical images in a dynamic medical environment.
- A vision-based gesture capture system interprets user's gestures in realtime to navigate through and manipulate an image and data visualization environment.
- Developed a deep learning model using CNN implemented in Keras backend Tensorflow and OpenCV which can recognize various gestures.

#### **Intelligent Image Segregator:**

• Developed a machine learning model using CNN which recognizes different categories of images and segregate them into respective albums/drive/folders.

#### **Chlorophyll Meter:**

- Developed an application for which will analyze the level of chlorophyll, nitrogen and phosphorus contents in plant image submitted by farmer & suggests the farmers about plant's health condition.
- Used OpenCV Library for leaf analysis.

#### **Smart City Architecture:**

• Created a LORA gateway for various applications like women safety and environment monitoring for long range communication.

### Remote Gas Pipeline Tunnel Temperature Monitoring System using Zigbee and IBM Watson

**Description:** The leading engineering and system integration providers needed exactly the right solution for a challenging gas pipeline application. In the confined space of a tunnel, temperature rises easily, and the overheating could cause pipeline fractures that could lead to gas leaks or even explosions.

- Developed a hardware system using **Zigbee technology** to monitor the temperature levels in the pipe line.
- Developed a web application is also build to visualize the data at all the nodes.

## TECHNICAL SKILLS

Development Boards	Communication Technologies	Communication Protocols	Software
<ul> <li>Arduino UNO, Mega, Nano, Gemma</li> <li>Raspberry Pi</li> <li>ESP8266 (Node MCU dev 1.0)</li> <li>ESP-32(made this work as beacon)</li> <li>LinkitONE</li> <li>Arduino YUN</li> <li>LoPy (PyCom)</li> </ul>	• Wi-Fi • Lora • Bluetooth • Zigbee • nRF	• HTTP • MQTT	Languages: Basics of C, Python, Solidity. Software tools: MIT App Inventor, Arduino IDE, Atom Cloud: Thing Speak, Pub Nub, Ubidots, IBM Cloud, FireBase, Carriot, weather underground, AWS Cloud Notification Servers: IFTTT, Pushing Box

# **EDUCATION**

Program	Institution	%	Year of completion
B Tech in ECE	Annamacharya Institute of Technology and Science, Hyderabad	81.6	2015
XII	Sri Chaithanya Jr College, Hyderabad	92	2011
X	Sandeepani Vidyalay, Hyderabad	92	2009

## PERSONAL SNIPPETS

SKILLS	ACHIEVEMENTS
Strong Communication Skills: Possess excellent	Stood First in Technical Quiz, Advaitha-2013, a
presentation and negotiation skills	National Level Symposium during the college (AITS)
Time Management: Consistently meet deadlines without compromising quality of work  Team Player: Thrive in a team environment  Problem solving: Hardworking and dedicated, reflected in my consistently high academic percentage	Published a technical paper on Cloud Computing at Advaitha-2013, AITS.  Academic topper in college for all the semesters in B.Tech.

### PERSONAL PROFILE

Name	Pradeepthi Duggaraju
Date of Birth	07-08-1994
Father's Name	Subramanyam Duggaraju
Hobbies	Exploring new technologies, Teaching, Mentoring
Languages known	English, Hindi and Telugu
Permanent Address	Flat no. 101, Sri Anjali Balaji Towers, Road no. 09, Yadav Nagar Alkapuri, Hyd - 35